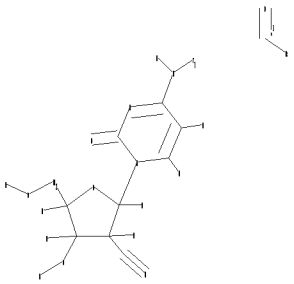
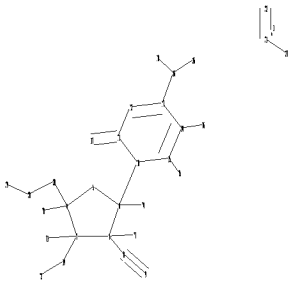
```
     FILE 'REGISTRY' ENTERED AT 14:01:17 ON 26 JAN 2010
                EXP 1/(2-CYANO-2-DEOXY-/CN
                EXP 1-(2-CYANO-2-DEOXY-/CN
                EXP 1-(2-C-CYANO-2-DEOXY-/CN
L1              STRUCTURE UPLOADED
L2            3 S L1

     FILE 'STNGUIDE' ENTERED AT 14:08:01 ON 26 JAN 2010

     FILE 'REGISTRY' ENTERED AT 14:09:43 ON 26 JAN 2010
L3              STRUCTURE UPLOADED
L4            3 S L3
L5           67 S L3 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:10:49 ON 26 JAN 2010
L6           61 S L5/THU
L7       974388 S CANCER OR TUMOR OR NEOPLA?
L8           49 S L6 AND L7
L9           22 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)

     FILE 'REGISTRY' ENTERED AT 14:11:53 ON 26 JAN 2010
                EXP ROSCOVITINE/CN
L10           1 S E2-E3

     FILE 'HCAPLUS' ENTERED AT 14:12:12 ON 26 JAN 2010
L11         600 S L10
L12          80 S L5
L13           3 S L11 AND L12
L14       29053 S CDK OR (CYCLIN DEPENDENT KINASE)
L15           3 S L12 AND L14
L16           2 S L15 NOT L13
```

```
=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

FILE 'REGISTRY' ENTERED AT 14:01:17 ON 26 JAN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   25 JAN 2010  HIGHEST RN 1203540-14-0
DICTIONARY FILE UPDATES:  25 JAN 2010  HIGHEST RN 1203540-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp 1/(2-cyano-2-deoxy-/cn
E1            1     1Ξ-HYDROXYTESTOSTERONE/CN
E2            1     1Ξ-HYDROXYURSODEOXYCHOLIC ACID/CN
E3            0 --> 1/(2-CYANO-2-DEOXY-/CN
E4            1     1/2MO/CN
E5            1     1/2PACM/CN
E6            1     1/4CR-1MO/CN
E7            1     1/4NC(LIG)/CN
E8            1     1/8BNC/CN
E9            1     10 20 XFC/CN
E10           1     10 CADHERIN (DANIO RERIO GENE CDH10)/CN
E11           1     10 CADHERIN (DANIO RERIO GENE PCDH10)/CN
E12           1     10 CARAT/CN

=> exp 1-(2-cyano-2-deoxy-/cn
E1            1     1-(2-CYANO-1-METHYLETHYL)-2-ISOPROPYLIMIDAZOLE/CN
E2            1     1-(2-CYANO-1-METHYLETHYL)-2-ISOPROPYLIMIDAZOLE MONOPICRATE/C
                    N
E3            0 --> 1-(2-CYANO-2-DEOXY-/CN
E4            1     1-(2-CYANO-2-METHYLPROPYL)-3-(2-FLUORO-4-((PIPERAZIN-1-YL)CA
                    RBONYL)PHENYL)UREA/CN
E5            1     1-(2-CYANO-3'-METHYLBIPHENYL-4-YL)-1H-PYRAZOLE-4-CARBOXYLIC
                    ACID/CN
E6            1     1-(2-CYANO-3'-METHYLBIPHENYL-4-YL)-1H-PYRAZOLE-4-CARBOXYLIC
                    ACID ETHYL ESTER/CN
E7            1     1-(2-CYANO-3,4-DIMETHOXYPHENYL)-3-BUTYLUREA/CN
E8            1     1-(2-CYANO-3,4-DIMETHOXYPHENYL)-3-METHYLUREA/CN
E9            1     1-(2-CYANO-3-METHYLPHENOXY)-2,3-EPOXYPROPANE/CN
E10           1     1-(2-CYANO-3-METHYLPHENOXY)-2-HYDROXY-3-ISOPROPYLAMINOPROPAN
                    E HYDROCHLORIDE/CN
E11           1     1-(2-CYANO-3-METHYLPHENOXY)-2-HYDROXY-3-TERT-BUTYLAMINOPROPA
```

```
                  NE-HYDROCHLORIDE/CN
E12          1    1-(2-CYANO-3-PYRAZINYL)-4-(3-(6-METHYL-2-PYRIDYL)-2-PROPYNYL
                  IDENE)PIPERIDINE/CN

=> exp 1-(2-C-cyano-2-deoxy-/cn
E1           1    1-(2-BUTYRYLOXYETHOXY)ETHYL METHACRYLATE/CN
E2           1    1-(2-C-ALLYL-B-D-RIBOFURANOSYL)THYMINE/CN
E3           0 --> 1-(2-C-CYANO-2-DEOXY-/CN
E4           1    1-(2-CARBAMOYL-1-METHYLETHYL)-1-METHYLPYRROLIDINIUM IODIDE/C
                  N
E5           1    1-(2-CARBAMOYL-1-METHYLETHYL)PYRIDINIUM BROMIDE/CN
E6           1    1-(2-CARBAMOYL-1-METHYLETHYL)PYRIDINIUM CHLORIDE/CN
E7           1    1-(2-CARBAMOYL-1-METHYLETHYL)PYRIDINIUM IODIDE/CN
E8           1    1-(2-CARBAMOYL-4-(6-FLUORO-7-(METHYLAMINO)-4-OXO-2H-BENZO(E)
                  (1,3)OXAZIN-3(4H)-YL)PHENYL)-3-((5-CHLOROTHIOPHEN-2-YL)SULFO
                  NYL)UREA/CN
E9           1    1-(2-CARBAMOYLETHYL)-1-METHYLPIPERIDINIUM BROMIDE/CN
E10          1    1-(2-CARBAMOYLETHYL)-1-PYRIDINIUM METHANESULFONATE/CN
E11          1    1-(2-CARBAMOYLETHYL)-2-(P-DIETHYLAMINOPHENYL)BENZ(CD)INDOLIU
                  M CHLORIDE/CN
E12          1    1-(2-CARBAMOYLETHYL)-2-METHYLPYRIDINIUM PICRATE/CN

=> log hold
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.49       0.71

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:02:04 ON 26 JAN 2010

Connecting via Winsock to STN



Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 14:07:09 ON 26 JAN 2010
FILE 'REGISTRY' ENTERED AT 14:07:09 ON 26 JAN 2010
COPYRIGHT (C) 2010 American Chemical Society (ACS)

COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.49       0.71

=>
Uploading C:\Program Files\STNEXP\Queries\10581585nucleoside.str
```





chain nodes :
8 9 16 17 18 19 20 21 22 23 26 28 29 30 31 32 33 34 35 36
ring nodes :
3 4 5 6 7 10 11 12 13 14 15
chain bonds :
3-19 3-31 4-20 4-30 6-10 6-34 7-8 7-33 8-9 11-17 13-16 14-36 15-35
16-18
16-26 19-32 20-28 21-22 21-23 28-29
ring bonds :
3-4 3-7 4-5 5-6 6-7 10-11 10-15 11-12 12-13 13-14 14-15
exact/norm bonds :
3-4 3-7 3-19 4-5 5-6 6-7 6-10 8-9 10-11 10-15 11-12 11-17 12-13 13-14
13-16 14-15 16-26 21-22 21-23
exact bonds :
3-31 4-20 4-30 6-34 7-8 7-33 14-36 15-35 16-18 19-32 20-28 28-29

G1:O,NH

G2:O,S

G3:H,[*1]

Connectivity :
23:1 X maximum RC ring/chain
Match level :
3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS
23:CLASS 26:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS
34:CLASS 35:CLASS
36:CLASS
Generic attributes :
23:
Saturation   : Saturated
Number of Carbon Atoms : 7 or more

L1   STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 14:07:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   28 TO ITERATE

100.0% PROCESSED   28 ITERATIONS   3 ANSWERS
SEARCH TIME: 00.00.01

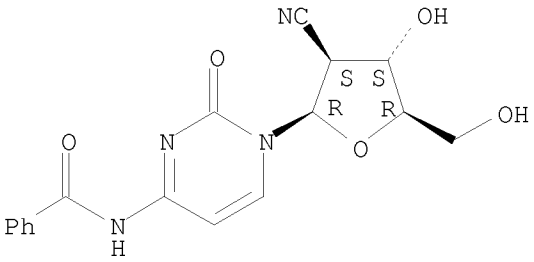
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 243 TO   877
PROJECTED ANSWERS: 3 TO   163

L2   3 SEA SSS SAM L1

=> d l2 scan

L2   3 ANSWERS   REGISTRY COPYRIGHT 2010 ACS on STN
IN   Benzamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-
     oxo-4-pyrimidinyl]-
MF   C17 H16 N4 O5

Absolute stereochemistry.

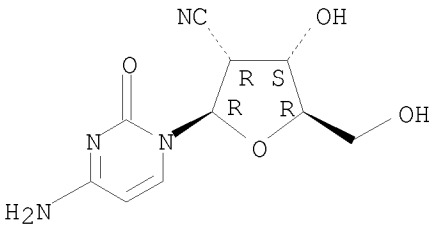


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L2 3 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Cytidine, 2'-deoxy-2'-cyano- (9CI)
MF C10 H12 N4 O4
CI COM

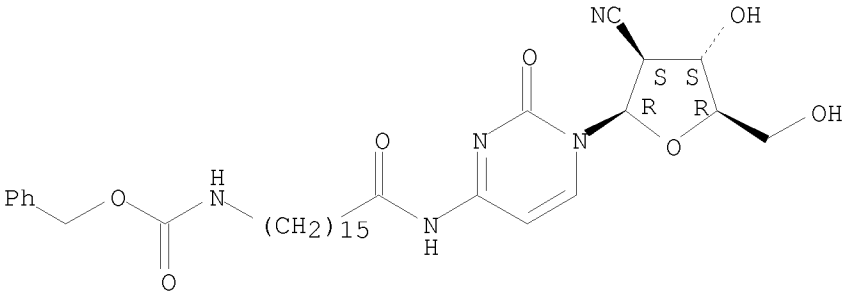
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 3 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Carbamic acid, [16-[[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]amino]-16-oxohexadecyl]-, phenylmethyl ester (9CI)
MF C34 H49 N5 O7

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.98	1.20

FILE 'STNGUIDE' ENTERED AT 14:08:01 ON 26 JAN 2010
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jan 22, 2010 (20100122/UP).

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	1.41

FILE 'REGISTRY' ENTERED AT 14:09:43 ON 26 JAN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JAN 2010 HIGHEST RN 1203540-14-0
DICTIONARY FILE UPDATES: 25 JAN 2010 HIGHEST RN 1203540-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

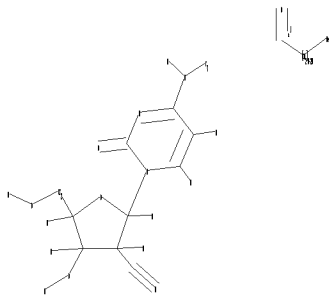
TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

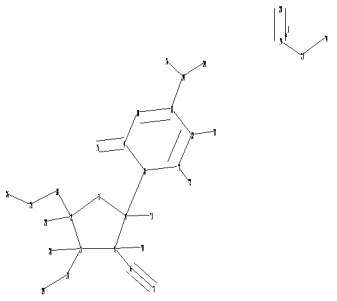
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10581585nucleoside2.str





chain nodes :
6 7 14 15 16 17 18 19 20 21 24 25 26 27 28 29 30 31 32 33 34

ring nodes :
1 2 3 4 5 8 9 10 11 12 13
chain bonds :
1-17 1-28 2-18 2-27 4-8 4-31 5-6 5-30 6-7 9-15 11-14 12-33 13-32 14-16
14-24 17-29 18-25 19-20 19-21 21-34 25-26
ring bonds :
1-2 1-5 2-3 3-4 4-5 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
1-2 1-5 1-17 2-3 3-4 4-5 4-8 6-7 8-9 8-13 9-10 9-15 10-11 11-12 11-14
12-13 14-24 19-20
exact bonds :
1-28 2-18 2-27 4-31 5-6 5-30 12-33 13-32 14-16 17-29 18-25 19-21 21-34
25-26

G3:H,[*1]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS
21:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS
31:CLASS 32:CLASS
33:CLASS 34:CLASS

L3   STRUCTURE UPLOADED

=> s l3
SAMPLE SEARCH INITIATED 14:09:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   28 TO ITERATE

100.0% PROCESSED   28 ITERATIONS   3 ANSWERS
SEARCH TIME: 00.00.01

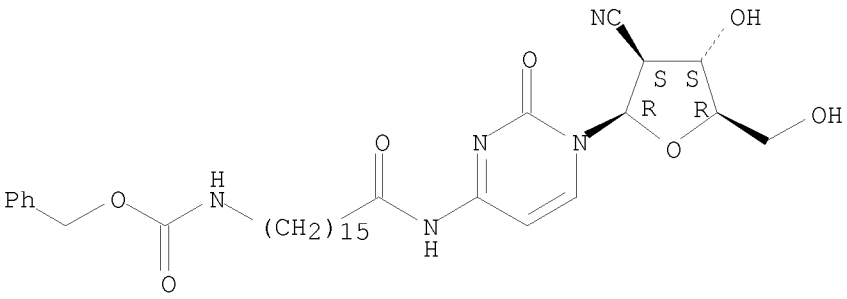
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 243 TO   877
PROJECTED ANSWERS: 3 TO   163

L4   3 SEA SSS SAM L3

=> d l4 scan

L4   3 ANSWERS   REGISTRY COPYRIGHT 2010 ACS on STN
IN   Carbamic acid, [16-[[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-
     dihydro-2-oxo-4-pyrimidinyl]amino]-16-oxohexadecyl]-, phenylmethyl ester
     (9CI)
MF   C34 H49 N5 O7

Absolute stereochemistry.



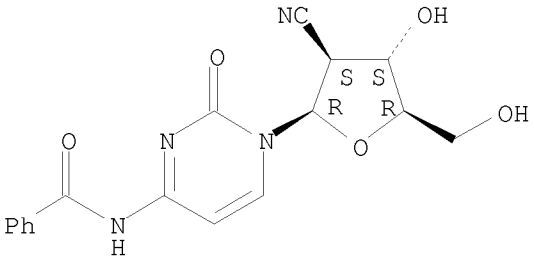
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L4   3 ANSWERS   REGISTRY COPYRIGHT 2010 ACS on STN
IN   Benzamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-
     oxo-4-pyrimidinyl]-

MF C17 H16 N4 O5

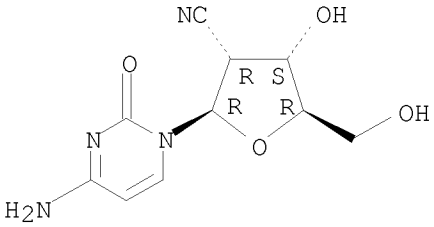
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 3 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Cytidine, 2'-deoxy-2'-cyano- (9CI)
MF C10 H12 N4 O4
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> 0
0 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d l3
L3 HAS NO ANSWERS
L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

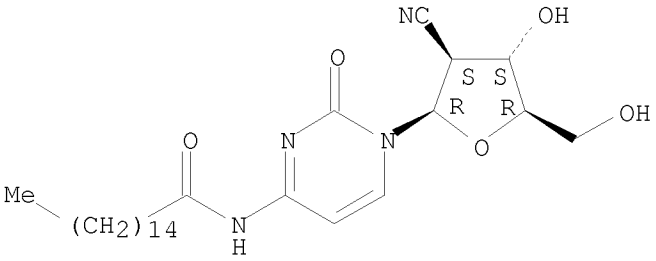
Structure attributes must be viewed using STN Express query preparation.

```
=> s l3 sss full
FULL SEARCH INITIATED 14:10:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      848 TO ITERATE

100.0% PROCESSED      848 ITERATIONS                                67 ANSWERS
SEARCH TIME: 00.00.01

L5           67 SEA SSS FUL L3

=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   192.03     193.44

FILE 'HCAPLUS' ENTERED AT 14:10:49 ON 26 JAN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 26 Jan 2010  VOL 152 ISS 5
FILE LAST UPDATED: 25 Jan 2010  (20100125/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Oct 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l5/thu
            80 L5
       1207596 THU/RL
L6          61 L5/THU
                 (L5 (L) THU/RL)

=> s cancer or tumor or neopla?
        440584 CANCER
        529823 TUMOR
        630275 NEOPLA?
L7      974388 CANCER OR TUMOR OR NEOPLA?

=> s l6 and l7
L8          49 L6 AND L7
```

```
=> s l8 and (PY<2004 or AY<2004 or PRY<2004)
      24054885 PY<2004
       4830892 AY<2004
       4304454 PRY<2004
L9          22 L8 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d l9 1-22 ti abs bib hitstr

L9   ANSWER 1 OF 22  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Combination of a CDK inhibitor and CS-682 or a metabolite thereof
AB   A first aspect of the invention relates to a combination comprising a CDK
     inhibitor and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-
     palmitoyl cytosine, or a metabolite thereof.  A second aspect of the
     invention relates to a pharmaceutical product comprising a CDK inhibitor
     and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-palmitoyl
     cytosine, or a metabolite thereof, as a combined preparation for simultaneous,
     sequential or sep. use in therapy.  A third aspect of the invention
     relates to a method of treating a proliferative disorder, said method
     comprising simultaneously, sequentially or sep. administering a CDK
     inhibitor and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-
     palmitoyl cytosine, or a metabolite thereof, to a subject.
AN   2005:523291  HCAPLUS <<LOGINID::20100126>>
DN   143:48129
TI   Combination of a CDK inhibitor and CS-682 or a metabolite thereof
IN   Green, Simon; Sleigh, Roger Neil
PA   Cyclacel Limited, UK
SO   PCT Int. Appl., 27 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2005053699        A1    20050616    WO 2004-GB5081          20041203 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     EP 1711185           A1    20061018    EP 2004-805910          20041203 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
     JP 2007513132         T     20070524    JP 2006-542014          20041203 <--
     US 20070270442        A1    20071122    US 2007-581585          20070420 <--
PRAI GB 2003-28180         A     20031204  <--
     WO 2004-GB5081        W     20041203
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
IT   151823-14-2, CS-682
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (antiproliferative combination of a CDK inhibitor and CS-682 or a
        metabolite thereof)
RN   151823-14-2  HCAPLUS
CN   Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-
```

dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI N4-substituted CNDAC derivatives for pancreatic cancer treatment
AB N4-substituted derivs. of the known antitumor compound 1-(2-C-cyano-2-deoxy-β-D-arabinopentofuranosyl)cytosine (CNDAC) are useful in treatment of pancreatic cancer, especially as an adjuvant treatment and especially over long-term administration. Compds. of the invention include e.g. the N4-palmitoyl derivative (CS-682).
AN 2005:14137 HCAPLUS <<LOGINID::20100126>>
DN 142:86630
TI N4-substituted CNDAC derivatives for pancreatic cancer treatment
IN Wang, Xiaoen; Wang, Jin Wei
PA Anticancer, Inc., USA
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

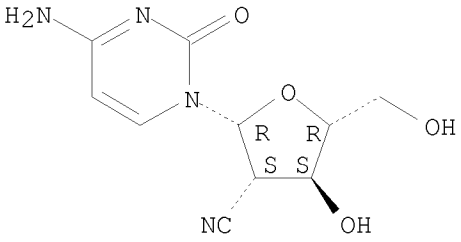
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005000204	A2	20050106	WO 2004-US15997	20040521 <--
	WO 2005000204	A3	20050915		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 20050014716	A1	20050120	US 2004-850936	20040520 <--
	AU 2004251598	A1	20050106	AU 2004-251598	20040521 <--
	CA 2525589	A1	20050106	CA 2004-2525589	20040521 <--
	CN 1791415	A	20060621	CN 2004-80013774	20040521 <--
	CN 100488516	C	20090520		
	EP 1677805	A2	20060712	EP 2004-752920	20040521 <--
	R: BE, CH, DE, FR, GB, LI				
	JP 2006528989	T	20061228	JP 2006-533288	20040521 <--
PRAI	US 2003-472529P	P	20030521	<--	

WO 2004-US15997 W 20040521

IT 135598-68-4D, derivs. 151823-14-2D, CS 682, derivs.
151823-35-7D, derivs. 151823-42-6D, derivs.
819805-91-9D, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N4-substituted CNDAC derivs. for pancreatic cancer treatment)

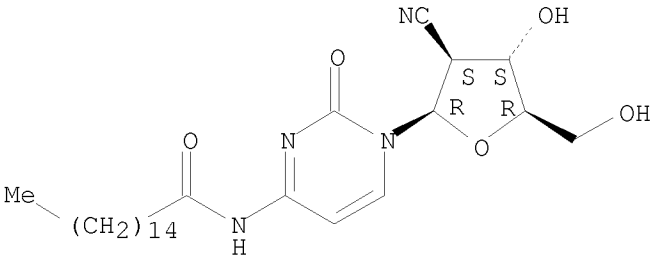
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



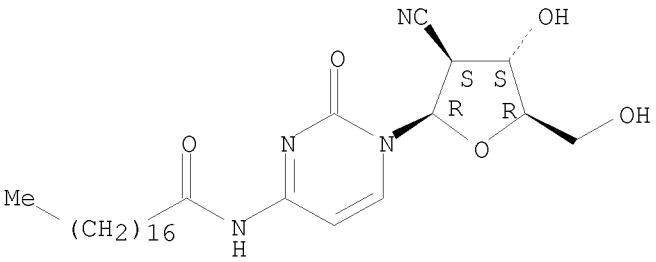
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



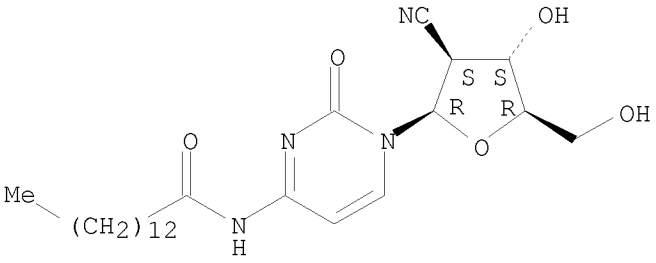
RN 151823-35-7 HCAPLUS
CN Octadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



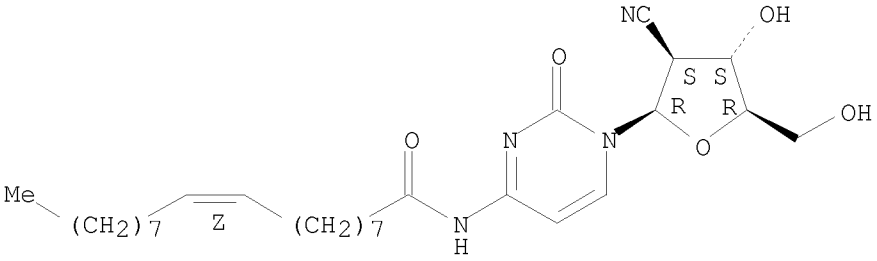
RN 151823-42-6 HCAPLUS
CN Tetradecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 819805-91-9 HCAPLUS
CN 9-Octadecenamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]-, (9Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



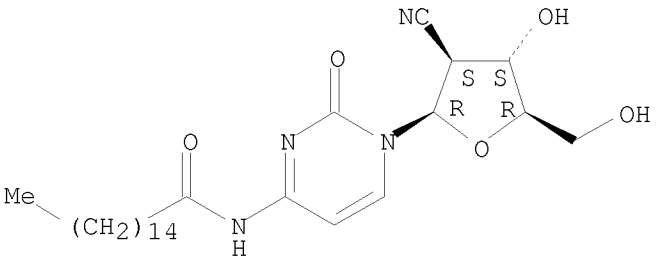
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Synergistic treatment of cancer using immunomers in conjunction with chemotherapeutic agents
AB The invention discloses the therapeutic use of immunostimulatory oligonucleotides and/or immunomers in combination with chemotherapeutic agents to provide a synergistic therapeutic effect.
AN 2004:1036851 HCAPLUS <<LOGINID::20100126>>
DN 142:696
TI Synergistic treatment of cancer using immunomers in conjunction with chemotherapeutic agents
IN Kandimalla, Ekambar R.; Agrawal, Sudhir; Wang, Daqin
PA Hybridon, Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004103301	A2	20041202	WO 2004-US15313	20040514 <--

WO 2004103301 A3 20051103
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2004241093 A1 20041202 AU 2004-241093 20040514 <--
AU 2004241093 B2 20090827
CA 2526212 A1 20041202 CA 2004-2526212 20040514 <--
US 20050009773 A1 20050113 US 2004-846167 20040514 <--
US 7569554 B2 20090804
EP 1628531 A2 20060301 EP 2004-752345 20040514 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
JP 2006528697 T 20061221 JP 2006-533117 20040514 <--
MX 2005012421 A 20060222 MX 2005-12421 20051116 <--
US 20080206265 A1 20080828 US 2008-20694 20080128 <--
PRAI US 2003-471247P P 20030516 <--
US 2004-846167 A1 20040514
WO 2004-US15313 W 20040514
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 142:696
IT 151823-14-2, CS-682
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory oligonucleotide and/or immunomer combination with chemotherapeutic agent for synergistic cancer treatment)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



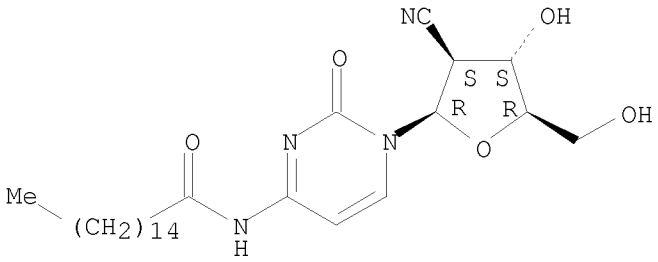
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Selective Antimetastatic Activity of Cytosine Analog CS-682 in a Red Fluorescent Protein Orthotopic Model of Pancreatic Cancer
AB In this study we demonstrate the ability of a novel, p.o.-administered cytosine analog, CS-682, to effectively prolong survival and inhibit metastatic growth in an imageable orthotopic mouse model of pancreatic

cancer. MIA-PaCa-2-RFP pancreatic cancer cells were transduced with the Discosoma red fluorescent protein (RFP) and orthotopically implanted onto the pancreas of nude mice. Tumor RFP fluorescence facilitated real-time, sequential imaging, and quantification of primary and metastatic growth and dissemination in vivo. Mice were treated with various p.o. doses of CS-682 on a five times per wk schedule until death. At a dose of 40 mg/kg, CS-682 prolonged survival compared with untreated animals (median survival 35 days vs. 17 days; P = 0.0008). At nontoxic doses, CS-682 effectively suppressed the rate of primary tumor growth. CS-682 also decreased the development of malignant ascites and the formation of metastases, which were reduced significantly in number in the diaphragm, lymph nodes, liver, and kidney. Selective RFP tumor fluorescence enabled noninvasive real-time comparison between groups during treatment and facilitated identification of micrometastases in solid organs at autopsy. Thus, we have demonstrated that CS-682 is an efficacious antimetastatic agent that significantly prolongs survival in an orthotopic model of pancreatic cancer. The antimetastatic efficacy of CS-682 and its p.o. availability confer significant advantages and clin. potential to this agent for pancreatic cancer.

AN 2003:733802 HCAPLUS <<LOGINID::20100126>>
DN 140:87233
TI Selective Antimetastatic Activity of Cytosine Analog CS-682 in a Red Fluorescent Protein Orthotopic Model of Pancreatic Cancer
AU Katz, Matthew H.; Bouvet, Michael; Takimoto, Shinako; Spivack, Daniel; Moossa, Abdool R.; Hoffman, Robert M.
CS Department of Surgery, University of California at San Diego, San Diego, CA, 92161, USA
SO Cancer Research (2003), 63(17), 5521-5525
CODEN: CNREA8; ISSN: 0008-5472
PB American Association for Cancer Research
DT Journal
LA English
IT 151823-14-2, CS-682
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(selective antimetastatic activity of cytosine analog CS-682 in pancreatic cancer model)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN

TI High-Resolution Magnetic Resonance Imaging of the Efficacy of the Cytosine Analogue 1-[2-C-Cyano-2-deoxy-β-D-arabino-pentofuranosyl]-N4-palmitoyl Cytosine (CS-682) in a Liver-Metastasis Athymic Nude Mouse Model

AB High-resolution magnetic resonance (MR) imaging techniques in a liver metastatic mouse model were used to assess CS-682, a novel 2'-deoxycytidine analog of 1-[2-C-cyano-2-deoxy-β-D-arabino-pentofuranosyl]-N4-palmitoyl cytosine. The efficacy of CS-682 was visualized in real time by MR imaging of initial seeding and subsequent growth of liver metastases. The relative therapeutic efficacies of CS-682 and two agents used clin., gemcitabine [2'-deoxy-2',2'-difluorocytidine monohydrochloride (DFDC)] and 5-fluorouracil (5-FU), were compared in this model. CS-682 was found to exhibit superior efficacy by delaying the onset and inhibiting the growth of liver metastasis compared with gemcitabine, 5-FU, and control. The overall occurrence of metastases was decreased 62% by CS-682, 18% by DFDC, and 35% by 5-FU. CS-682 increased the life span of the treated animals significantly, by 28 days above the 29-day median survival without treatment, compared with 11 days by DFDC and 14 days by 5-FU. The increased survival in CS-682-treated animals correlated with the antimetastatic activity of this compound These preclin. findings support the potential clin. utility of CS-682 in the treatment of liver metastasis.

AN 2003:373234 HCAPLUS <<LOGINID::20100126>>

DN 139:332554

TI High-Resolution Magnetic Resonance Imaging of the Efficacy of the Cytosine Analogue 1-[2-C-Cyano-2-deoxy-β-D-arabino-pentofuranosyl]-N4-palmitoyl Cytosine (CS-682) in a Liver-Metastasis Athymic Nude Mouse Model

AU Wu, Ming; Mazurchuk, Richard; Chaudhary, Neeta D.; Spernyak, Joseph; Veith, Jean; Pera, Paula; Greco, William; Hoffman, Robert M.; Kobayashi, Tomowo; Bernacki, Ralph J.

CS Departments of Pharmacology and Therapeutics and Molecular and Cellular Biophysics, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SO Cancer Research (2003), 63(10), 2477-2482
CODEN: CNREA8; ISSN: 0008-5472

PB American Association for Cancer Research

DT Journal

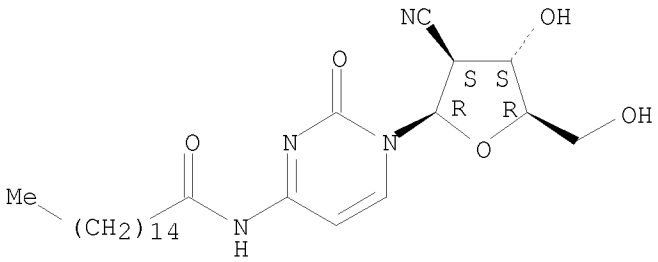
LA English

IT 151823-14-2, CS-682
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-resolution magnetic resonance imaging of efficacy of cytosine analog 1-[2-C-cyano-2-deoxy-β-D-arabino-pentofuranosyl]-N4-palmitoyl cytosine (CS-682) in a liver-metastasis athymic nude mouse model)

RN 151823-14-2 HCAPLUS

CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

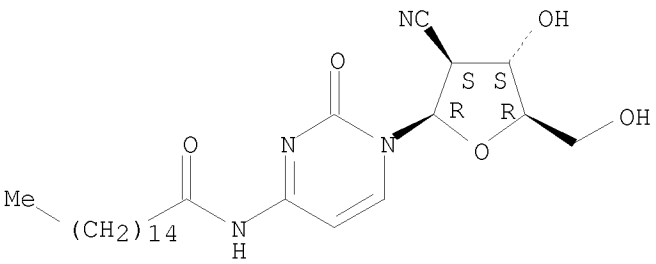
Absolute stereochemistry.



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Role of body surface area in dosing of investigational anticancer agents in adults, 1991-2001
AB The prescribed dose of anticancer agents is most commonly calculated using body surface area as the only independent variable, and it has been shown that this approach still results in large inter-patient variability in drug exposure. Here, we retrospectively assessed the pharmacokinetics of 33 investigational agents tested in phase I trials from 1991 through 2001, as a function of body surface area in 1650 adult cancer, patients. Twelve of the drugs were administered orally, 19 were administered i.v., and two were administered by both routes. Body surface area-based dosing was statistically significantly associated with a reduction in inter-patient variability in drug clearance for only five of the 33 agents: docosahexaenoic acid (DHA)-paclitaxel, 5-fluorouracil/eniluracil, paclitaxel, temozolomide, and troxacitabine. These results do not support the use of body surface area in dose calcns. and suggest that alternate dosing strategies should be evaluated. We conclude that body surface area should not be used to determine starting doses of investigational agents in future phase I studies.
AN 2003:55812 HCAPLUS <<LOGINID::20100126>>
DN 139:223633
TI Role of body surface area in dosing of investigational anticancer agents in adults, 1991-2001
AU Baker, Sharyn D.; Verweij, Jaap; Rowinsky, Eric K.; Donehower, Ross C.; Schellens, Jan H. M.; Grochow, Louise B.; Sparreboom, Alex
CS Division of Experimental Therapeutics, The Sydney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD, USA
SO Journal of the National Cancer Institute (2002), 94(24), 1883-1888
CODEN: JNCIEQ; ISSN: 0027-8874
PB Oxford University Press
DT Journal
LA English
IT 151823-14-2, CS-682
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(role of body surface area in dosing of investigational anticancer agents in adults)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 62 THERE ARE 62 CAPLUS RECORDS THAT CITE THIS RECORD (62 CITINGS)
RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

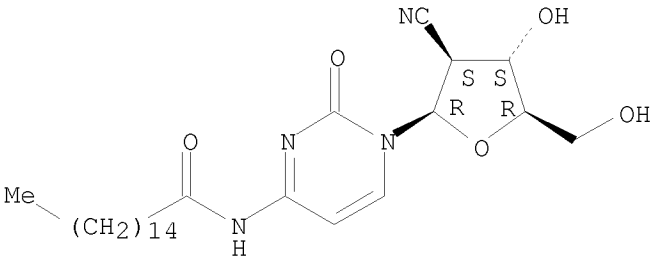
L9 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation of crystal of pyrimidine nucleoside derivative
AB Crystals of a pyrimidine nucleoside derivative, namely 2'-cyano-2'-deoxy-N4-palmitoyl-1-β-D-arabinofuranosylcytosine (I) having excellent antitumor activity in warm blooded animals, in particular human, are prepared by crystallization from anhydrous or water-containing Me acetate and characterized by powder X-ray diffraction anal. They are improved in storage stability and easiness of handling and excellent in oral absorbability. Pharmaceutical compns. containing I, e.g. solution and aerosol, were prepared
AN 2002:637691 HCAPLUS <<LOGINID::20100126>>
DN 137:169744
TI Preparation of crystal of pyrimidine nucleoside derivative
IN Takita, Takashi; Ohtsuka, Keiichi; Numagami, Eiji; Harashima, Susumu
PA Sankyo Company, Limited, Japan
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064609	A1	20020822	WO 2002-JP986	20020206 <--
	W: AU, BR, CA, CN, CO, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PH, PL, RU, SG, SK, US, VN, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	CA 2437994	A1	20020822	CA 2002-2437994	20020206 <--
	AU 2002230164	A1	20020828	AU 2002-230164	20020206 <--
	AU 2002230164	B2	20050407		
	EP 1364959	A1	20031126	EP 2002-711347	20020206 <--
	EP 1364959	B1	20070509		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	HU 2003003159	A2	20031229	HU 2003-3159	20020206 <--
	HU 2003003159	A3	20070628		
	BR 2002007102	A	20040127	BR 2002-7102	20020206 <--
	CN 1501939	A	20040602	CN 2002-807933	20020206 <--
	CN 100408591	C	20080806		
	NZ 527393	A	20040730	NZ 2002-527393	20020206 <--
	RU 2256666	C2	20050720	RU 2003-124648	20020206 <--
	AT 361929	T	20070615	AT 2002-711347	20020206 <--
	PT 1364959	E	20070723	PT 2002-711347	20020206 <--
	ES 2286237	T3	20071201	ES 2002-711347	20020206 <--
	IL 157216	A	20080320	IL 2002-157216	20020206 <--
	IN 2003KN00991	A	20050708	IN 2003-KN991	20030801 <--
	US 20040053883	A1	20040318	US 2003-637300	20030807 <--
	US 6908906	B2	20050621		
	ZA 2003006121	A	20041108	ZA 2003-6121	20030807 <--
	MX 2003007123	A	20031118	MX 2003-7123	20030808 <--
PRAI	JP 2001-33128	A	20010209 <--		
	JP 2002-26232	A	20020204 <--		
	WO 2002-JP986	W	20020206 <--		

IT 151823-14-2
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic

use); BIOL (Biological study); PROC (Process); USES (Uses)
(preparation of crystals of pyrimidine nucleoside derivative having excellent
antitumor activity)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



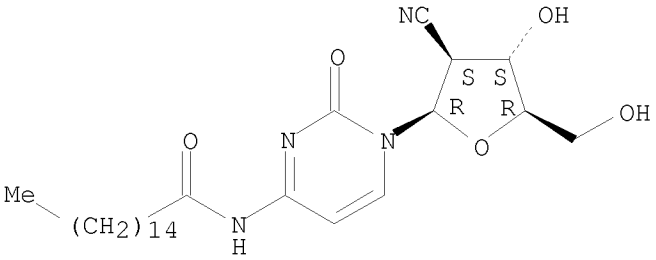
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods for enhancing antibody-induced cell lysis and treating cancer
AB The invention relates to methods and products for treating cancer . In particular the invention relates to combinations of nucleic acids and antibodies for the treatment and prevention of cancer. The invention also relates to diagnostic methods for screening cancer cells.
AN 2001:935435 HCAPLUS <<LOGINID::20100126>>
DN 136:84677
TI Methods for enhancing antibody-induced cell lysis and treating cancer
IN Weiner, George; Hartmann, Gunther
PA University of Iowa Research Foundation, USA
SO PCT Int. Appl., 312 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001097843	A2	20011227	WO 2001-US20154	20010622 <--
WO 2001097843	A3	20030123		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2410371	A1	20011227	CA 2001-2410371	20010622 <--
AU 2001070134	A	20020102	AU 2001-70134	20010622 <--
US 20030026801	A1	20030206	US 2001-888326	20010622 <--
US 7534772	B2	20090519		

EP 1296714 A2 20030402 EP 2001-948684 20010622 <--
EP 1296714 B1 20090826
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003535907 T 20031202 JP 2002-503327 20010622 <--
AU 2001270134 B2 20060615 AU 2001-270134 20010622 <--
AT 440618 T 20090915 AT 2001-948684 20010622 <--
AU 2006216542 A1 20061012 AU 2006-216542 20060915 <--
AU 2006216542 B2 20090430
AU 2009203061 A1 20090820 AU 2009-203061 20090728 <--
AU 2009212978 A1 20091001 AU 2009-212978 20090901 <--
PRAI US 2000-213346P P 20000622 <--
AU 2001-270134 A3 20010622 <--
WO 2001-US20154 W 20010622 <--
AU 2006-216542 A3 20060915
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
IT 151823-14-2, CS-682
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory nucleic acids and antibody specific to CD20, CD22, CD19 or CD40 for inducing cell lysis and treating cancer)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



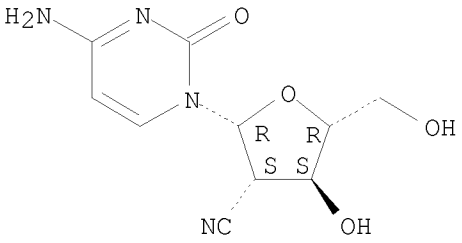
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Deletion mutants of human deoxycytidine kinase mRNA in cells resistant to antitumor cytosine nucleosides
AB We studied mutational events in deoxycytidine (dCyd) kinase mRNA expression, focusing on aberrant dCyd kinase mRNA, which has been frequently observed in established cell lines resistant to antitumor dCyd nucleoside analogs such as 1-β-D-arabinofuranosyl cytosine (Ara-C), gemcitabine (dFdC) and 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC). We describe here the expression of aberrant dCyd kinase mRNAs identified as splicing mutants. These mutants included deletions of the fifth exon in CNDAC-resistant cells (originating from HT-1080 cells), of the third exon in Ara-C-resistant cells (originating from SK-MEL-28 cells) and of the fourth exon in 2'-deoxy-2'-methylidenecytidine (DMDC)-resistant cells (originating from SK-MEL-28 cells). Various nucleoside-resistant cells originating from the same parental HT-1080 cells were established. The resulting cells expressed the same mRNA with deletion of the fifth exon, and the location of splicing was independent of the type of nucleosides used for the establishment of resistant cells. The deletion of the fifth exon in dCyd

kinase seems to be a target for acquisition of resistance to antitumor cytosine nucleosides. However, distinct mutations in the dCyd kinase gene seem to be associated with acquisition of resistance to different antitumor cytosine nucleosides.

AN 2001:671059 HCAPLUS <<LOGINID::20100126>>
DN 136:31393
TI Deletion mutants of human deoxycytidine kinase mRNA in cells resistant to antitumor cytosine nucleosides
AU Obata, Tohru; Endo, Yoshio; Tanaka, Motohiro; Uchida, Hiroyuki; Matsuda, Akira; Sasaki, Takuma
CS Department of Experimental Therapeutics, Cancer Research Institute, Kanazawa University, Kanazawa, 920-0934, Japan
SO Japanese Journal of Cancer Research (2001), 92(7), 793-798
CODEN: JJCREP; ISSN: 0910-5050
PB Japanese Cancer Association
DT Journal
LA English
IT 135598-68-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(deletion mutants of human deoxycytidine kinase mRNA in cells resistant to antitumor cytosine nucleosides)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.

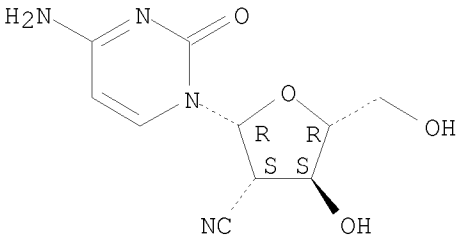


OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Targeting and anti-tumor efficacy of liposomal 5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine in mice lung bearing B16BL6 melanoma
AB 2'-C-cyano-2'-deoxy-1-β-d-arabinopentofuranosylcytosine (CNDAC) is a potent anticancer agent, and we previously observed that liposomal formulation of 5'-O-dipalmitoylphosphatidyl derivative of CNDAC (DPP-CNDAC) is desirable for targeting. For targeting to pulmonary cancer, we investigated the in vivo behavior of liposomes containing DPP-CNDAC by a non-invasive method using positron emission tomog. Liposomes composed of DPP-CNDAC and cholesterol (DPP-CNDAC/CH liposomes) were markedly accumulated in mice lung bearing B16BL6 melanoma. In metastatic pulmonary cancer model, DPP-CNDAC/CH liposomes significantly reduced the lung colonization in a dose-dependent manner. The activity was significantly superior to conventional liposomal formulation or soluble CNDAC. These results suggest that DPP-CNDAC/CH liposomes are useful for metastatic pulmonary cancer.
AN 2000:895848 HCAPLUS <<LOGINID::20100126>>

DN 134:290061
TI Targeting and anti-tumor efficacy of liposomal 5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine in mice lung bearing B16BL6 melanoma
AU Asai, T.; Shuto, S.; Matsuda, A.; Kakiuchi, T.; Ohba, H.; Tsukada, H.; Oku, N.
CS Department of Radiobiochemistry, School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, 422-8526, Japan
SO Cancer Letters (Shannon, Ireland) (2001), 162(1), 49-56
CODEN: CALEDQ; ISSN: 0304-3835
PB Elsevier Science Ireland Ltd.
DT Journal
LA English
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(targeting and antitumor efficacy of liposomal 5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine in mice lung bearing B16BL6 melanoma)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



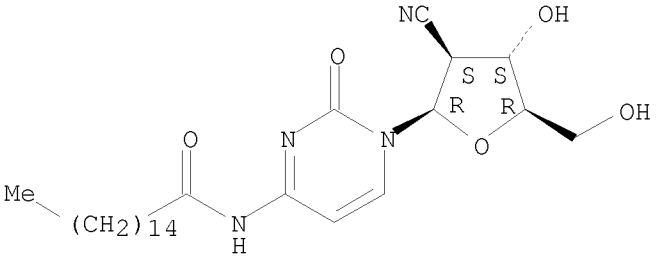
OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Liposome preparation of fat-soluble antitumor drug
AB The invention relates to a liposome preparation containing 1-(2'-cyano-2'-deoxy-β-D-arabinopentofuranosyl)-N4-palmitoylcytosine acting as an antitumor agent, which exhibits high drug transfer to tumor tissue and high residence in such tissue and can be put to practical use.
AN 2000:814316 HCAPLUS <<LOGINID::20100126>>
DN 133:366425
TI Liposome preparation of fat-soluble antitumor drug
IN Kasuya, Yuji; Okada, Junichi; Hanaoka, Kenji; Kurakata, Shinichi; Matsuda, Akira; Sasaki, Takuma
PA Sankyo Co., Ltd., Japan
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2000067760 A1 20001116 WO 2000-JP2993 20000510 <--
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
JP 2001026544 A 20010130 JP 2000-136600 20000510 <--
PRAI JP 1999-129639 A 19990511 <--
IT 151823-14-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liposome preparation of fat-soluble antitumor drug)
RN 151823-14-2 HCAPLUS
CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

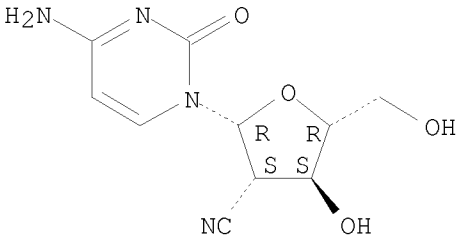


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Studies on the expression of deoxycytidine kinase gene in the CNDAC-resistant cell line
AB Ara-C and CNDAC are two effective antitumor chemotherapeutic agents which need phosphorylation by deoxycytidine kinase (dCK)for the activation of their cytotoxicity. In order to identify the reason for the drug resistance, the expression of dck mRNA in human tumor fibrosarcoma HT-1080 and its drug resistant cell line CN-20 was analyzed. The 799 bp coding region for the dck gene was amplified by the RT-PCR method from the total RNA of the parental cells, but the products from the resistant cells were two fragments: 799 bp and 683 bp. Compared with the normal fragment, there was a 116 bp deletion in the aberrant 683 bp fragment,which located in the fifth exon of the dck gene. Two point mutations had also been found in the 799 bp fragment. These results suggest that the acquired resistance to CNDAC can be attributed to a deficiency of dCK activity, which might be based on the genetic mutation of the dck gene.
AN 2000:653106 HCAPLUS <<LOGINID::20100126>>
DN 133:344311
TI Studies on the expression of deoxycytidine kinase gene in the CNDAC-resistant cell line
AU Han, Ning; Ming, Zheng-huan
CS College of Life Sciences, Zhejiang University, Hangzhou, 310012, Peop. Rep. China
SO Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao (2000), 16(4), 520-523
CODEN: ZSHXF2; ISSN: 1007-7626
PB Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao Bianweihui
DT Journal

LA Chinese
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CNDAC; studies on the expression of deoxycytidine kinase gene in the CNDAC-resistant cell line)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



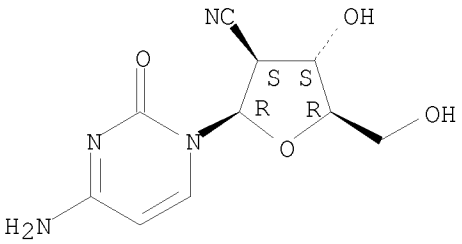
L9 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Liposome compositions containing antitumor drugs
AB Disclosed are liposome compns. containing 1-(2'-cyano-2'-deoxy-β-D-arabino-pentofranosyl)cytosine (CNDAC) antitutor agent, sterols, and phosphatidylcholines, which are excellent in the accumulation in tumor tissues and the retention therein and thus exert a favorable antitumor activity. Multilayer liposomes were prepared from CNDAC·HCl, dipalmitoylphosphatidylcholine, dipalmitoylphosphatidylglycerol, cholesterol, N-monomethoxypolyethylene glycolsuccinyl-distearoylphosphatidylethanolamine, glucose, trehalose, and water, and the antitumor activity was examined
AN 2000:592565 HCAPLUS <<LOGINID::20100126>>
DN 133:168414
TI Liposome compositions containing antitumor drugs
IN Kasuya, Yuji; Okada, Junichi; Hanaoka, Kenji; Kurakata, Shinichi; Matsuda, Akira; Sasaki, Takuma
PA Sankyo Company, Ltd., Japan
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000048611	A1	20000824	WO 2000-JP948	20000218 <--
	W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 2000302685	A	20001031	JP 2000-37397	20000216 <--
PRAI	JP 1999-39801	A	19990218 <--		

IT 134665-72-8 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor liposome compns. containing CNDAC and sterols and

phosphatidylcholines and phosphatidylethanolamine derivs.)
RN 134665-72-8 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-, hydrochloride (1:1) (CA INDEX NAME)

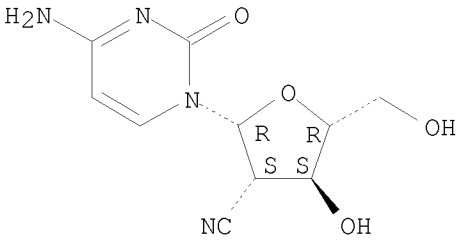
Absolute stereochemistry.



● HCl

RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Antitumor activity and novel DNA-self-strand-breaking mechanism of CNDAC (1-(2-C-cyano-2-deoxy-β-D-arabino-pentofuranosyl)cytosine) and its N4-palmitoyl derivative (CS-682)
AB We have studied the antitumor activity and the novel DNA-self-strand-breaking mechanism of CNDAC (1-(2-C-cyano-2-deoxy-β-D-arabino-pentofuranosyl)cytosine) and its N4-palmitoyl derivative (CS-682). In vitro, CS-682 showed strong cytotoxicity against human tumor cells comparable with that of CNDAC; both compds. displayed a similar broad spectrum. In vivo, however, orally administered CS-682 showed a more potent activity against human tumor xenografts than CNDAC, 5'-deoxy-5-fluorouridine, 5-fluorouracil and 2',2'-difluorodeoxycytidine. Moreover, CS-682 was effective against various human organ tumor xenografts at a wide dose range and with low toxicity, and was effective against P388 leukemic cells resistant to mitomycin-C, vincristine, 5-fluorouracil or cisplatin in syngeneic mice. CNDAC, an active metabolite of CS-682, had a prolonged

plasma half-life after repeated oral administrations of CS-682 but not after oral administrations of CNDAC itself. This difference may partially explain the higher antitumor activity of CS-682 relative to CNDAC. In both CNDAC- and CS-682-treated carcinoma cells, CNDAC 5'-triphosphate (CNDACTP) was generated and incorporated into a DNA strand. High performance liquid chromatog. (HPLC) and mass spectrometric anal. of the nucleosides prepared by digestion of the DNA from the CNDAC-treated cells detected ddCNC (2'-C-cyano-2',3'-didehydro-2',3'-dideoxycytidine), which was shown to be generated only when the self-strand-breakage of CNDACTP-incorporated DNA occurred. The cytotoxicity of CNDAC was completely abrogated by the addition of 2'-deoxycytidine and was low against cells with decreased deoxycytidine kinase. Our results suggest that CNDAC is converted to CNDACMP by deoxycytidine kinase and that the resulting CNDACTP incorporated into a DNA strand as CNDACMP may induce DNA-self-strand-breakage. This novel DNA-self-strand-breaking mechanism may contribute to the potent antitumor activity of CS-682.

AN 1999:438485 HCAPLUS <<LOGINID::20100126>>

DN 131:266648

TI Antitumor activity and novel DNA-self-strand-breaking mechanism of CNDAC (1-(2-C-cyano-2-deoxy-β-D-arabino-pentofuranosyl)cytosine) and its N4-palmitoyl derivative (CS-682)

AU Hanaoka, Kenji; Suzuki, Masako; Kobayashi, Tomowo; Tanzawa, Fumie; Tanaka, Kazuo; Shibayama, Takahiro; Miura, Shinichi; Ikeda, Tomoko; Iwabuchi, Haruo; Nakagawa, Akihiko; Mitsuhashi, Yoshihiro; Hisaoka, Masashi; Kaneko, Masakatsu; Tomida, Akihiro; Wataya, Yusuke; Nomura, Tatsuji; Sasaki, Takuma; Matsuda, Akira; Tsuruo, Takashi; Kurakata, Shinichi

CS Biological Research Laboratories, Sankyo Co., Ltd., Tokyo, 140-8710, Japan

SO International Journal of Cancer (1999), 82(2), 226-236
CODEN: IJCNAW; ISSN: 0020-7136

PB Wiley-Liss, Inc.

DT Journal

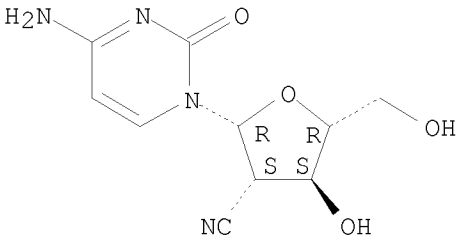
LA English

IT 135598-68-4 151823-14-2, CS-682
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(antitumor activity and DNA-self-strand-breaking mechanism of 2'-deoxycytidine analog CNDAC and its N4-palmitoyl derivative CS-682)

RN 135598-68-4 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

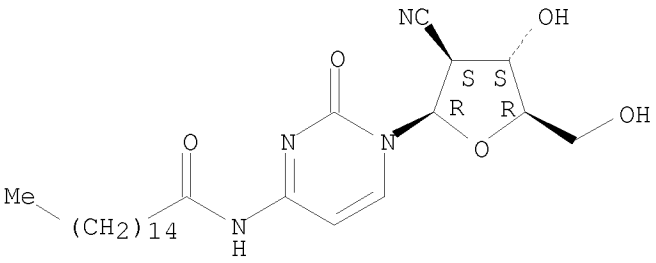
Absolute stereochemistry.



RN 151823-14-2 HCAPLUS

CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (35 CITINGS)
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

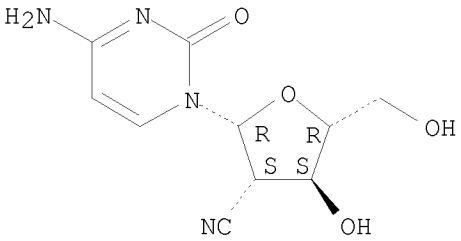
L9 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Therapy of lung metastatic cancer by lung-targeted liposomal 5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosyl-cytosine
AB 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosylcytosine (CNDAC), a novel antitumor nucleoside antimetabolite, has a new mechanism of action for damaging tumor cells. This compound showed potent growth inhibitory activity against various kinds of human tumor cells both in vitro and in vivo. Furthermore, 5'-phosphatidylation of the compound enhanced the antitumor activity. We liposomalized 5'-O-dipalmitoylphosphatidyl derivative of CNDAC(DPP-CNDAC) and investigated the effect of DPP-CNDAC incorporation on the in vivo behavior of these liposomes by a non-invasive method using positron emission tomog.(PET). Interestingly, liposomes composed of DPP-CNDAC and cholesterol(DPP-CNDAC/CH liposomes) were observed to have a tendency to accumulate in lungs. Furthermore, this accumulation was markedly enhanced in the mice bearing lung metastatic cancer. Therefore, we attempted to use these CNDAC/CH liposomes for lung targeting and to examine the therapeutic efficacy against lung metastatic cancer. In exptl. model using highly lung metastatic murine B16BL6 melanoma cells, these liposomes significantly reduced the number of lung tumor colonies as well as the size of them in a dose dependent manner. On the contrary, reduced lung colonization was not seen by use of the formulation of conventional liposomes or soluble CNDAC. These results were coincident with the data of PET anal., and suggesting the usefulness of DPP-CNDAC/CH liposomes for curing lung metastasis.
AN 1999:383158 HCAPLUS <<LOGINID::20100126>>
DN 131:233467
TI Therapy of lung metastatic cancer by lung-targeted liposomal 5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosyl-cytosine
AU Asai, Tomohiro; Kurohane, Kohta; Okada, Shoji; Shuto, Satoshi; Awano, Hirokazu; Matsuda, Akira; Tsukada, Hideo; Oku, Naoto
CS School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, 422-8526, Japan
SO Drug Delivery System (1999), 14(2), 103-108
CODEN: DDSYEI; ISSN: 0913-5006
PB Nippon DDS Gakkai Jimukyoku
DT Journal
LA Japanese
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(therapy of lung metastatic cancer by targeted liposomal

5'-O-dipalmitoylphosphatidyl 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosyl-cytosine)

RN 135598-68-4 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-(CA INDEX NAME)

Absolute stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Determinants in chemosensitivity of oncogene-transformed NIH3T3 cells to 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine

AB 2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC) is a novel 2'-deoxycytidine (dCyd) analog with potent antitumor activity. To elucidate the determinants of chemosensitivity to CNDAC, the intracellular accumulation of CNDAC and the activities of dCyd kinase and cytidine deaminase were investigated in transformed NIH 3T3 cells with different genetic bases. The results indicate that the primary determinants of chemosensitivity to CNDAC are different in each cell type, but membrane transportation and the enzyme activities of dCyd kinase and cytidine deaminase are critical factors underlying the antitumor action of CNDAC. Moreover, the expression or function of these factors appears to be influenced by the activation of various oncogenes.

AN 1999:169183 HCAPLUS <<LOGINID::20100126>>

DN 131:27524

TI Determinants in chemosensitivity of oncogene-transformed NIH3T3 cells to 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine

AU Zhang, Min; Endo, Yoshio; Sasaki, Takuma

CS Department of Experimental Therapeutics, Cancer Research Institute, Kanazawa University, Kanazawa, 920-0934, Japan

SO International Journal of Oncology (1999), 14(3), 543-549
CODEN: IJONES; ISSN: 1019-6439

PB International Journal of Oncology

DT Journal

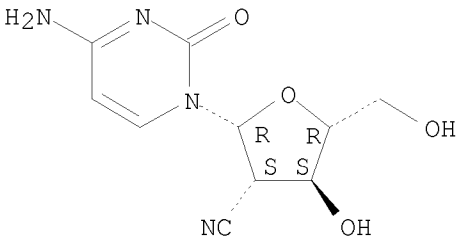
LA English

IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(determinants in chemosensitivity of oncogene-transformed NIH3T3 cells to 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine)

RN 135598-68-4 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-(CA INDEX NAME)

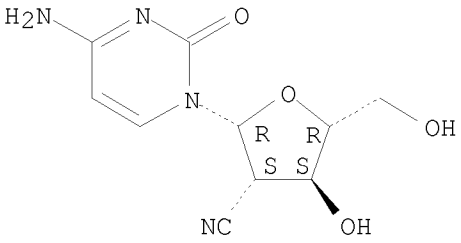
Absolute stereochemistry.



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Why is the DNA-strand-breaker, PCNDAC, effective to solid tumors?
AB A review with 12 refs., on action mechanism of antitumor 2'-deoxycytidine derivative, PCNDAC, a prodrug of CNDAC, discussing intracellular transport of antitumor nucleoside, feedback inhibitory action of triphosphates on mouse deoxycytidine kinase, inhibition of DNA formation by DNA-strand breaking, and apoptosis induction in human solid tumors.
AN 1998:621620 HCAPLUS <<LOGINID::20100126>>
DN 130:96
TI Why is the DNA-strand-breaker, PCNDAC, effective to solid tumors?
AU Matsuda, Akira; Sasaki, Takuma
CS Grad. Sch. Pharm. Sci., Hokkaido Univ., Sapporo, 060-0812, Japan
SO Tanpakushitsu Kakusan Koso (1998), 43(13), 1981-1989
CODEN: TAKKAJ; ISSN: 0039-9450
PB Kyoritsu Shuppan
DT Journal; General Review
LA Japanese
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)
(action mechanism of DNA-strand-breaker PCNDAC on solid tumors)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-
(CA INDEX NAME)

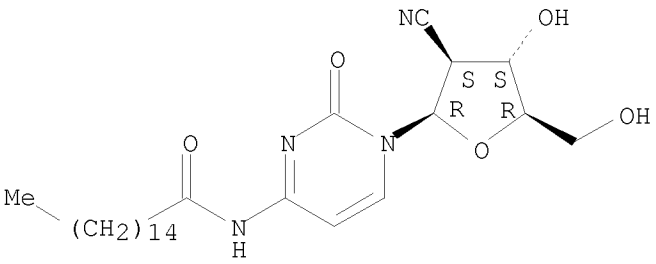
Absolute stereochemistry.



IT 151823-14-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(action mechanism of DNA-strand-breaker PCNDAC on solid tumors)
RN 151823-14-2 HCAPLUS

CN Hexadecanamide, N-[1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

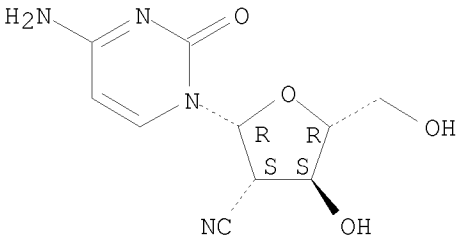
Absolute stereochemistry.



L9 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Development and biochemical characterization of a 2'-C-cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine (CNDAC)-resistant variant of the human fibrosarcoma cell line HT-1080
AB 2'-C-Cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine (CNDAC) is an antitumor nucleoside with a novel chemical structure that exerts potent antitumor activity against various human tumor cells in vitro and in vivo. To be active it needs to be phosphorylated by deoxycytidine (dCyd) kinase. The authors induced resistance to CNDAC in the human fibrosarcoma cell line HT-1080 by exposure to increasing concns. of CNDAC. The resistant cells showed over 560 times higher resistance as compared to that of the parental HT-1080 cells and were cross-resistant to the other 2'-deoxycytidine derivs. The dCyd kinase mRNA expression of the resistant cells decreased and there was the expression of aberrant mRNA of dCyd kinase which contained a 116-nucleotide deletion within the coding region, corresponding to the fifth exon of the gene. The dCyd kinase enzymic activity of the resistant cells was deficient. The initial uptake of CNDAC into the resistant cells was similar to that of the parental cells. However, the incorporation of CNDAC into the DNA fraction of the resistant cells was significantly less than that of the parent cells. These results led the authors to conclude that the acquired resistance to CNDAC can be attributed to a deficiency of dCyd kinase activity, which should be based on a remarkable decrease in mRNA expression and genetic mutation of the dCyd kinase gene, but not on cellular CNDAC accumulation.
AN 1998:15291 HCAPLUS <<LOGINID::20100126>>
DN 128:175860
OREF 128:34515a,34518a
TI Development and biochemical characterization of a 2'-C-cyano-2'-deoxy-1-β-d-arabino-pentofuranosylcytosine (CNDAC)-resistant variant of the human fibrosarcoma cell line HT-1080
AU Obata, Tohru; Endo, Yoshio; Tanaka, Motohiro; Matsuda, Akira; Sasaki, Takuma
CS Cancer Research Institute, Department of Experimental Therapeutics and Development Center for Molecular Target Drugs, Kanazawa University, 13-1 Takaramachi, Kanazawa, 920, Japan
SO Cancer Letters (Shannon, Ireland) (1998), 123(1), 53-61
CODEN: CALEDQ; ISSN: 0304-3835
PB Elsevier Science Ireland Ltd.
DT Journal
LA English
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic

use); BIOL (Biological study); PROC (Process); USES (Uses)
(development of cyanodeoxydarabinopentofuranosylcytosine-resistant human fibrosarcoma cell line HT-1080 in relation to deoxycytidine kinase expression and incorporation into DNA)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-
(CA INDEX NAME)

Absolute stereochemistry.

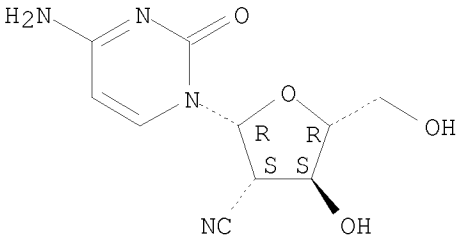


OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Design of a new antitumor nucleoside, CNDAC, against solid tumors
AB A review with 9 refs. The design, antitumor activity in vitro as well as in vivo, and mechanism of CNDAC have been described. CNDAC (2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine) had potent antitumor effects against various solid tumors in vitro as well as in vivo. CNDAC was phosphorylated by deoxycytidine kinase, followed by certain nucleotide kinases to afford its 5'-triphosphate (CNDACTP), which was a potent inhibitor of DNA polymerase α. Using a chain-extension method with Vent (exo-) DNA polymerase and a short primer/template system, the authors found that CNDACTP was incorporated into the primer. After further chain-extension reaction of the primer containing CNDAC at the 3'-terminus, chain elongation was not observed Therefore, CNDACTP appeared to act as a chain-terminator. Analyses of the structure of the 3'-terminus in the primer revealed the presence of ddCNC together with CNDAC and CNDC. The existence of ddCNC in the 3'-end of the primer would be due to the self-strand-break by the nucleotide incorporated next to CNDAC.
AN 1996:143402 HCAPLUS <<LOGINID::20100126>>
DN 124:249363
OREF 124:45845a,45848a
TI Design of a new antitumor nucleoside, CNDAC, against solid tumors
AU Matsuda, Akira
CS Fac. Pharm. Sci., Hokkaido Univ., Japan
SO Gan to Kagaku Ryoho (1996), 23(2), 202-10
CODEN: GTKRDX; ISSN: 0385-0684
PB Gan to Kagaku Ryohosha
DT Journal; General Review
LA Japanese
IT 135598-68-4
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CNDAC; design of a new antitumor nucleoside, CNDAC, against solid tumors)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-

(CA INDEX NAME)

Absolute stereochemistry.

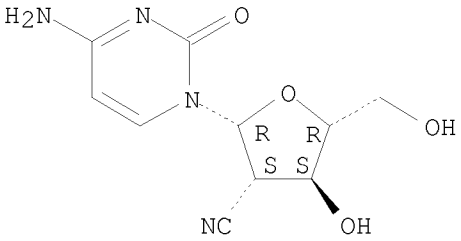


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI 2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC): a mechanism-based DNA-strand-breaking antitumor nucleoside
AB The antitumor mechanism of action of 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC) has been examined CNDAC was designed as a potentially DNA-self-strand-breaking nucleoside. It has potent antitumor effects against various solid tumors in vitro as well as in vivo. Using a chain-extension method with Vent (exo-) DNA polymerase and a short primer/template system, the authors found that 5'-triphosphate of CNDAC (CNDACTP) was incorporated into the primer at a site opposite a guanine residue in the template. After further chain-extension reaction of the primer containing CNDAC at the 3'-terminus, chain elongation was not observed Therefore, CNDACTP appeared to act as a chain-terminator. Analyses of the structure of the 3'-terminus in the primer revealed 2'-C-cyano-2',3'-didehydro-2',3'-dideoxycytidine (ddCNC) together with CNDAC and 2'-C-cyano-2'-deoxy-1-β-D-ribofuranosylcytosine (CNDC). The existence of ddCNC in the 3'-end of the primer would be due to the self-strand-break by the nucleotide incorporated next to CNDAC. The authors also found that CNDAC was epimerized to CNDC in near-neutral to alkaline media. Therefore, CNDC found in the primer was epimerized after incorporation of CNDACTP into the primer. The authors also described the metabolism of CNDAC.
AN 1995:631018 HCAPLUS <<LOGINID::20100126>>
DN 123:132187
OREF 123:23181a,23184a
TI 2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC): a mechanism-based DNA-strand-breaking antitumor nucleoside
AU Matsuda, Akira; Azuma, Atsushi
CS Faculty Pharmaceutical Sciences, Hokkaido University, Sapporo, 060, Japan
SO Nucleosides & Nucleotides (1995), 14(3-5), 461-71
CODEN: NUNUD5; ISSN: 0732-8311
PB Dekker
DT Journal
LA English
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cyanodeoxyarabinofuranosylcytosine as mechanism-based DNA-strand-breaking antitumor nucleoside)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-

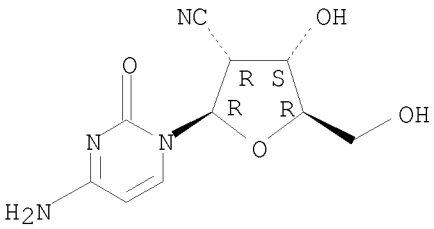
(CA INDEX NAME)

Absolute stereochemistry.



IT 140859-14-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MFM (Metabolic formation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
(cyanodeoxyarabinofuranosylcytosine as mechanism-based DNA-strand-breaking antitumor nucleoside)
RN 140859-14-9 HCAPLUS
CN Cytidine, 2'-deoxy-2'-cyano- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

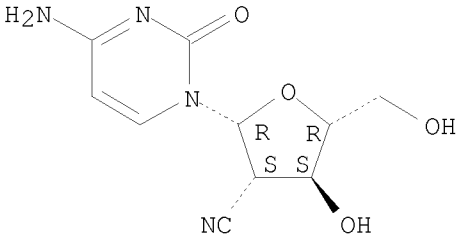


OSC.G 39 THERE ARE 39 CAPLUS RECORDS THAT CITE THIS RECORD (39 CITINGS)

L9 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Antitumor activity of a novel nucleoside, 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC) against murine and human tumors
AB The antitumor effects of 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC), a synthetic ara-C derivative, were examined and compared with that of ara-C in murine tumors and in various human tumors using three different chemosensitivity tests. CNDAC extended the life span of mice bearing P388 leukemia. CNDAC had a unique in vitro antitumor spectrum for human cancers different from that of ara-C. Compared with ara-C, CNDAC was more effective in 10 human tumors (2 lung, 4 stomach and 4 osteosarcoma), equal in 2 tumors (lung and fibrosarcoma) and less potent in 11 tumors (4 lung, 4 osteosarcoma, bladder, renal and epidermoid). Characteristically CNDAC showed excellent activities against tumors, refractory to ara-C, such as HT-1080 human fibrosarcoma implanted in chick embryos or athymic mice, although its cytotoxicity against HT-1080 was almost equal to that of ara-C. Thus, CNDAC is an interesting and promising agent that should be considered for further detailed preclin. evaluation.
AN 1992:462502 HCAPLUS <<LOGINID::20100126>>
DN 117:62502

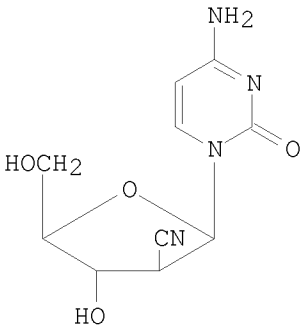
OREF 117:10787a,10790a
TI Antitumor activity of a novel nucleoside, 2'-C-cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC) against murine and human tumors
AU Tanaka, Motohiro; Matsuda, Akira; Terao, Tomoko; Sasaki, Takuma
CS Cancer Res. Inst., Kanazawa Univ., Kanazawa, 920, Japan
SO Cancer Letters (Shannon, Ireland) (1992), 64(1), 67-74
CODEN: CALEDQ; ISSN: 0304-3835
DT Journal
LA English
IT 135598-68-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neoplasm inhibition by, in human and laboratory animal cells)
RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 50 THERE ARE 50 CAPLUS RECORDS THAT CITE THIS RECORD (50 CITINGS)

L9 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Nucleosides and nucleotides. 100. 2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC): design of a potential mechanism-based DNA-strand-breaking antineoplastic nucleoside
GI



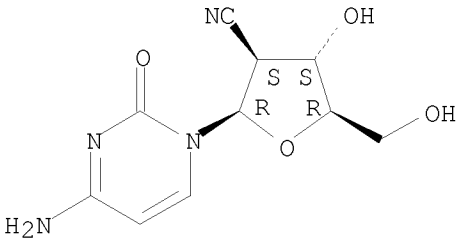
I

AB A new type of antineoplastic nucleoside,

2'-C-cyano-2'-deoxy-β-D-arabinofuranosylcytosine (CNDAC) (I) has been designed based on the hypothesis that if a nucleoside had a chemical reactivity to cleave a DNA strand after its incorporation into the DNA mol. it could exert a unique antineoplastic activity. I was synthesized from the corresponding 2'-keto nucleoside via cyanohydrin formation followed by radical deoxygenation of the phenoxyghiocarbonate of the 2'-hydroxy group. I has not only potent antileukemic activity against mouse L1210 cells (IC50 = 0.21 μg/mL) but also potent inhibitory activity of growth of various human tumor cells in vitro with IC50 values 0.04 to 6.8 μg/mL. In vivo antitumor activity of I against p388 was also examined When I was i.p. administered once a day for 10 days continuously with a dose of 20 mg/kg, 5 out of 6 mice survived over 60 days (T/C >600%). Thus I is a promising antitumor agent that should be considered for further detailed preclin. evaluation.

AN 1991:526535 HCAPLUS <<LOGINID::20100126>>
DN 115:126535
OREF 115:21449a,21452a
TI Nucleosides and nucleotides. 100. 2'-C-Cyano-2'-deoxy-1-β-D-arabinofuranosylcytosine (CNDAC): design of a potential mechanism-based DNA-strand-breaking antineoplastic nucleoside
AU Matsuda, Akira; Nakajima, Yuki; Azuma, Atsushi; Tanaka, Motohiro; Sasaki, Takuma
CS Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
SO Journal of Medicinal Chemistry (1991), 34(9), 2917-19
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
OS CASREACT 115:126535
IT 134665-72-8P 135598-68-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and antitumor activity of)
RN 134665-72-8 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)-, hydrochloride (1:1) (CA INDEX NAME)

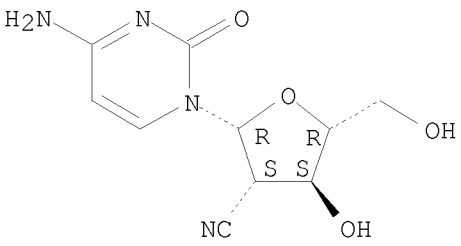
Absolute stereochemistry.



● HCl

RN 135598-68-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-cyano-2-deoxy-β-D-arabinofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 57 THERE ARE 57 CAPLUS RECORDS THAT CITE THIS RECORD (57 CITINGS)

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	133.64	327.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-18.70	-18.70

FILE 'REGISTRY' ENTERED AT 14:11:53 ON 26 JAN 2010

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JAN 2010 HIGHEST RN 1203540-14-0
DICTIONARY FILE UPDATES: 25 JAN 2010 HIGHEST RN 1203540-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp roscovitine/cn

E1	1	ROSCOPENIN/CN
E2	1	ROSCOVITIN/CN
E3	1 -->	ROSCOVITINE/CN
E4	1	ROSCOVITINE CARBOXYLIC ACID/CN
E5	1	ROSE ACETONE/CN
E6	1	ROSE ALLOY/CN
E7	1	ROSE B 1333/CN
E8	1	ROSE BD/CN
E9	1	ROSE BENGAL/CN
E10	1	ROSE BENGAL (131I) SODIUM/CN

```
E11          1     ROSE BENGAL 3-IODOPROPYL ESTER MONOSODIUM SALT/CN
E12          1     ROSE BENGAL 4-BROMOBUTYL ESTER MONOSODIUM SALT/CN

=> s E2-E3
             1 ROSCOVITIN/CN
             1 ROSCOVITINE/CN
L10          1 (ROSCOVITIN/CN OR ROSCOVITINE/CN)

=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    11.49     338.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00     -18.70

FILE 'HCAPLUS' ENTERED AT 14:12:12 ON 26 JAN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 26 Jan 2010  VOL 152 ISS 5
FILE LAST UPDATED: 25 Jan 2010  (20100125/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Oct 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l10
L11        600 L10

=> d his

     (FILE 'HOME' ENTERED AT 14:01:05 ON 26 JAN 2010)

     FILE 'REGISTRY' ENTERED AT 14:01:17 ON 26 JAN 2010
                EXP 1/(2-CYANO-2-DEOXY-/CN
                EXP 1-(2-CYANO-2-DEOXY-/CN
                EXP 1-(2-C-CYANO-2-DEOXY-/CN
L1              STRUCTURE UPLOADED
L2            3 S L1
```

```
     FILE 'STNGUIDE' ENTERED AT 14:08:01 ON 26 JAN 2010

     FILE 'REGISTRY' ENTERED AT 14:09:43 ON 26 JAN 2010
L3              STRUCTURE UPLOADED
L4            3 S L3
L5           67 S L3 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:10:49 ON 26 JAN 2010
L6           61 S L5/THU
L7       974388 S CANCER OR TUMOR OR NEOPLA?
L8           49 S L6 AND L7
L9           22 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)

     FILE 'REGISTRY' ENTERED AT 14:11:53 ON 26 JAN 2010
                EXP ROSCOVITINE/CN
L10           1 S E2-E3

     FILE 'HCAPLUS' ENTERED AT 14:12:12 ON 26 JAN 2010
L11         600 S L10

=> s l5
L12          80 L5

=> s l11 and l12
L13           3 L11 AND L12

=> d l13 1-3 ti abs bib

L13  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Compositions and methods using Stat3 pathway inhibitors or cancer stem
     cell inhibitors for combination cancer treatment
AB   The present invention relates to the composition and methods of use of Stat3
     pathway inhibitors or cancer stem cell inhibitors in combination treatment
     of cancer.
AN   2009:332545  HCAPLUS <<LOGINID::20100126>>
DN   150:345478
TI   Compositions and methods using Stat3 pathway inhibitors or cancer stem
     cell inhibitors for combination cancer treatment
IN   Li, Chiang Jia; Mikule, Keith; Li, Youzhi
PA   Boston Biomedical, Inc., USA
SO   PCT Int. Appl., 81pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2009036101        A1    20090319    WO 2008-US75906         20080910
         W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
```

PRAI US 2007-971144P P 20070910
US 2007-13372P P 20071213
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Antiproliferative effects of sapacitabine (CYC682), a novel 2'-deoxycytidine-derivative, in human cancer cells
AB This study assessed the antiproliferative activity of sapacitabine (CYC682, CS-682) in a panel of 10 human cancer cell lines with varying degrees of resistance or sensitivity to the commonly used nucleoside analogs ara-C and gemcitabine. Growth inhibition studies using sapacitabine and CNDAC were performed in the panel of cell lines and compared with both nucleoside analogs and other anticancer compds. including oxaliplatin, doxorubicin, docetaxel and seliciclib. Sapacitabine displayed antiproliferative activity across a range of concns. in a variety of cell lines, including those shown to be resistant to several anticancer drugs. Sapacitabine is biotransformed by plasma, gut and liver amidases into CNDAC and causes cell cycle arrest predominantly in the G2/M phase. No clear correlation was observed between sensitivity to sapacitabine and the expression of critical factors involved in resistance to nucleoside analogs such as deoxycytidine kinase (dCK), human equilibrative nucleoside transporter 1, cytosolic 5'-nucleotidase and DNA polymerase-α. However, sapacitabine showed cytotoxic activity against dCK-deficient L1210 cells indicating that in some cells, a dCK-independent mechanism of action may be involved. In addition, sapacitabine showed a synergistic effect when combined with gemcitabine and sequence-specific synergy with doxorubicin and oxaliplatin. Sapacitabine is therefore a good candidate for further evaluation in combination with currently used anticancer agents in tumor types with unmet needs.
AN 2007:959718 HCAPLUS <<LOGINID::20100126>>
DN 148:92336
TI Antiproliferative effects of sapacitabine (CYC682), a novel 2'-deoxycytidine-derivative, in human cancer cells
AU Serova, M.; Galmarini, C. M.; Ghoul, A.; Benhadji, K.; Green, S. R.; Chiao, J.; Faivre, S.; Cvitkovic, E.; Le Tourneau, C.; Calvo, F.; Raymond, E.
CS RayLab - Department of Medical Oncology, Hopital Beaujon, Clichy, 92110, Fr.
SO British Journal of Cancer (2007), 97(5), 628-636
CODEN: BJCAAI; ISSN: 0007-0920
PB Nature Publishing Group
DT Journal
LA English
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Combination of a CDK inhibitor and CS-682 or a metabolite thereof
AB A first aspect of the invention relates to a combination comprising a CDK inhibitor and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-palmitoyl cytosine, or a metabolite thereof. A second aspect of the invention relates to a pharmaceutical product comprising a CDK inhibitor and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-palmitoyl cytosine, or a metabolite thereof, as a combined preparation for simultaneous, sequential or sep. use in therapy. A third aspect of the invention relates to a method of treating a proliferative disorder, said method comprising simultaneously, sequentially or sep. administering a CDK inhibitor and 1-(2-C-cyano-2-dioxy-β-D-arabino-pentofuranosyl)-N4-

palmitoyl cytosine, or a metabolite thereof, to a subject.
AN 2005:523291 HCAPLUS <<LOGINID::20100126>>
DN 143:48129
TI Combination of a CDK inhibitor and CS-682 or a metabolite thereof
IN Green, Simon; Sleigh, Roger Neil
PA Cyclacel Limited, UK
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005053699	A1	20050616	WO 2004-GB5081	20041203
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1711185	A1	20061018	EP 2004-805910	20041203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	JP 2007513132	T	20070524	JP 2006-542014	20041203
	US 20070270442	A1	20071122	US 2007-581585	20070420
PRAI	GB 2003-28180	A	20031204		
	WO 2004-GB5081	W	20041203		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 14:01:05 ON 26 JAN 2010)

FILE 'REGISTRY' ENTERED AT 14:01:17 ON 26 JAN 2010
EXP 1/(2-CYANO-2-DEOXY-/CN
EXP 1-(2-CYANO-2-DEOXY-/CN
EXP 1-(2-C-CYANO-2-DEOXY-/CN
L1 STRUCTURE UPLOADED
L2 3 S L1

FILE 'STNGUIDE' ENTERED AT 14:08:01 ON 26 JAN 2010

FILE 'REGISTRY' ENTERED AT 14:09:43 ON 26 JAN 2010
L3 STRUCTURE UPLOADED
L4 3 S L3
L5 67 S L3 SSS FULL

FILE 'HCAPLUS' ENTERED AT 14:10:49 ON 26 JAN 2010
L6 61 S L5/THU
L7 974388 S CANCER OR TUMOR OR NEOPLA?
L8 49 S L6 AND L7
L9 22 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)

```
     FILE 'REGISTRY' ENTERED AT 14:11:53 ON 26 JAN 2010
                EXP ROSCOVITINE/CN
L10           1 S E2-E3

     FILE 'HCAPLUS' ENTERED AT 14:12:12 ON 26 JAN 2010
L11         600 S L10
L12          80 S L5
L13           3 S L11 AND L12

=> log hold

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      12.21     350.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       -2.55     -21.25

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:12:40 ON 26 JAN 2010

Connecting via Winsock to STN



Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 14:13:21 ON 26 JAN 2010
FILE 'HCAPLUS' ENTERED AT 14:13:21 ON 26 JAN 2010
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      12.21     350.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       -2.55     -21.25

=> s CDK or (cyclin dependent kinase)
          6706 CDK
         43132 CYCLIN
       1266568 DEPENDENT
        370848 KINASE
         27042 CYCLIN DEPENDENT KINASE
                 (CYCLIN(W)DEPENDENT(W)KINASE)
L14      29053 CDK OR (CYCLIN DEPENDENT KINASE)

=> s l12 and l14
L15           3 L12 AND L14

=> s l15 not l13
L16           2 L15 NOT L13
```

=> d l16 1-2 ti abs bib

L16 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Ataxia-telangiectasia and Rad3-related and DNA-dependent protein kinase cooperate in G2 checkpoint activation by the DNA strand-breaking nucleoside analogue 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosylcytosine
AB 2'-C-Cyano-2'-deoxy-1-β-D-arabino-pentofuranosylcytosine (CNDAC), the prodrug (sapacitabine) of which is in clin. trials, has the novel mechanism of action of causing single-strand breaks after incorporating into DNA. Cells respond to this unique lesion by activating the G2 checkpoint, affected by the Chk1-Cdc25C-cyclin-dependent kinase 1/cyclin B pathway. This study aims at defining DNA damage checkpoint sensors that activate this response to CNDAC, particularly focusing on the major phosphatidylinositol 3-kinase-like protein kinase family proteins. First, fibroblasts, deficient in ataxia-telangiectasia mutated (ATM), transfected with empty vector or repleted with ATM, were arrested in G2 by CNDAC to similar extents, suggesting ATM is not required to activate the G2 checkpoint. Second, chromatin assocns. of RPA70 and RPA32, subunits of the ssDNA-binding protein, and the ataxia-telangiectasia and Rad3-related (ATR) substrate Rad17 and its phosphorylated form were increased on CNDAC exposure, suggesting activation of ATR kinase. The G2 checkpoint was abrogated due to depletion of ATR by small interfering RNA, and impaired in ATR-Seckel cells, indicating participation of ATR in this G2 checkpoint pathway. Third, the G2 checkpoint was more stringent in glioma cells with wild-type DNA-dependent protein kinase catalytic subunit (DNA-PKcs) than those with mutant DNA-PKcs, as shown by mitotic index counting. CNDAC-induced G2 arrest was abrogated by specific DNA-PKcs inhibitors or small interfering RNA knockdown in ML-1 and/or HeLa cells. Finally, two phosphatidylinositol 3-kinase-like protein kinase inhibitors, caffeine and wortmannin, abolished the CNDAC-induced G2 checkpoint in a spectrum of cell lines. Together, our data showed that ATR and DNA-PK cooperate in CNDAC-induced activation of the G2 checkpoint pathway. [Mol Cancer Ther 2008;7(1):133-42].
AN 2008:64824 HCAPLUS <<LOGINID::20100126>>
DN 148:322141
TI Ataxia-telangiectasia and Rad3-related and DNA-dependent protein kinase cooperate in G2 checkpoint activation by the DNA strand-breaking nucleoside analogue 2'-C-cyano-2'-deoxy-1-β-D-arabino-pentofuranosylcytosine
AU Liu, Xiaojun; Matsuda, Akira; Plunkett, William
CS Department of Experimental Therapeutics, The University of Texas M. D. Anderson Cancer Center, Houston, TX, USA
SO Molecular Cancer Therapeutics (2008), 7(1), 133-142
CODEN: MCTOCF; ISSN: 1535-7163
PB American Association for Cancer Research
DT Journal
LA English
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods for enhancing antibody-induced cell lysis and treating cancer
AB The invention relates to methods and products for treating cancer. In particular the invention relates to combinations of nucleic acids and antibodies for the treatment and prevention of cancer. The invention also relates to diagnostic methods for screening cancer cells.
AN 2001:935435 HCAPLUS <<LOGINID::20100126>>
DN 136:84677

TI Methods for enhancing antibody-induced cell lysis and treating cancer
IN Weiner, George; Hartmann, Gunther
PA University of Iowa Research Foundation, USA
SO PCT Int. Appl., 312 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001097843	A2	20011227	WO 2001-US20154	20010622
	WO 2001097843	A3	20030123		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2410371	A1	20011227	CA 2001-2410371	20010622
	AU 2001070134	A	20020102	AU 2001-70134	20010622
	US 20030026801	A1	20030206	US 2001-888326	20010622
	US 7534772	B2	20090519		
	EP 1296714	A2	20030402	EP 2001-948684	20010622
	EP 1296714	B1	20090826		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003535907	T	20031202	JP 2002-503327	20010622
	AU 2001270134	B2	20060615	AU 2001-270134	20010622
	AT 440618	T	20090915	AT 2001-948684	20010622
	AU 2006216542	A1	20061012	AU 2006-216542	20060915
	AU 2006216542	B2	20090430		
	AU 2009203061	A1	20090820	AU 2009-203061	20090728
	AU 2009212978	A1	20091001	AU 2009-212978	20090901
PRAI	US 2000-213346P	P	20000622		
	AU 2001-270134	A3	20010622		
	WO 2001-US20154	W	20010622		
	AU 2006-216542	A3	20060915		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT